Source Selection Statement for the Facilities Development and Operations Contract (FDOC) National Aeronautics and Space Administration

On November 5, 2008, I met with the members of the Source Evaluation Board (SEB) appointed to evaluate proposals for the Facilities Development and Operations Contract (FDOC) Solicitation, NNJ08221364R. Several other officials of the Lyndon B. Johnson Space Center (JSC) and NASA Headquarters also attended the meeting. FDOC is a Cost Plus Award Fee (CPAF) contract with Baseline, Indefinite Delivery/Indefinite Quantity (IDIQ) Delivery Orders, and Level-of-effort (LOE) Task Orders. The basic period of performance for this acquisition is 3.75 years, from January 1, 2009 through September 30, 2012. There are two 1-year options. The Not-To-Exceed (NTE) amount for the basic effort is \$667,321,349. The 1st year option price is \$154,172,023 and the 2nd year option price is \$155,489,693. This acquisition is a follow-on contract to the Mission Support and Operations Contract (MSOC), and includes content removed from the ongoing Space Program Operations Contract (SPOC).

The scope of the FDOC effort includes the following: the development, sustaining engineering, operations, and maintenance of multiple Mission Operations Directorate (MOD) facilities and systems supporting training, flight design, flight planning, reconfiguration, and real-time operations for the current and future human space flight programs: Space Shuttle, International Space Station (ISS), and Constellation. Additionally, FDOC will provide the development and sustaining of software applications supporting the above functions.

Background

On May 5, 2008, the contracting officer issued Request for Proposals (RFP) NNJ08221364R with a past performance proposal receipt date of June 9, 2008 and technical and cost proposals receipt date of July 8, 2008. Two offerors, Lockheed Martin Corporation (LM) and The Boeing Company (Boeing), submitted proposals in response to the RFP.

RFP Section M, Evaluation Factors For Award, Provision M.2 stated that:

The Government will award a contract resulting from this solicitation to the offeror whose proposal represents the best value after evaluation. This procurement shall be conducted utilizing a combination of mission suitability, past performance, and cost/price

Mission Suitability had a 1,000 point value divided into four subfactors:

Subfactor 1: Technical Approach 450

Subfactor 2: Management Approach 300

Subfactor 3: Safety, Health, and Environmental Plan

150

Subfactor 4: Small Business Participation

100

Mission Suitability was evaluated and rated using the following adjectival ratings for the subfactors: Excellent, Very Good, Good, Fair, and Poor.

Past Performance was evaluated and rated using the following scale: Very High Level of Confidence, High Level of Confidence, Moderate Level of Confidence, Low Level of Confidence, Very Low Level of Confidence, and Neutral/Unknown Confidence.

A cost/price analysis of each offeror's proposed cost was conducted and a probable cost was developed for selection that included the basic period and all options. The Cost/Price Confidence Levels utilized were: High, Medium, and Low.

RFP Section M: M.2 Evaluation Factors For Award provided:

Of the three evaluation factors, mission suitability and past performance, when combined, are significantly more important than cost. Mission suitability is more important than past performance. Mission suitability and cost are approximately equal in importance.

In accordance with the above stated provision, the SEB evaluated each proposal on the basis of Mission Suitability, Past Performance, and Cost/Price. On August 29, 2008, the Contracting Officer recommended that both offerors' proposals should fall within the competitive range. I concurred with the Contracting Officer's recommendation. Accordingly, the Board invited both offerors to participate in written and oral discussions, and each was given the opportunity to correct, clarify, substantiate, or confirm the contents of its respective proposal and to submit a final proposal revision (FPR), as well as a signed model contract reflecting the offeror's intent to be bound contractually. After considering the results of the FPR, the Board concluded its final evaluation and determined the Mission Suitability scores for the proposals.

The SEB gave the LM's proposal an overall Mission Suitability score of 906 points out of a maximum 1000 points. On the sub-factor level, LM's proposal was determined to be Excellent in Technical Approach, Excellent in Management Approach, Very Good in Safety and Health Approach, and Excellent in Small Business Participation.

The SEB gave the Boeing proposal an overall Mission Suitability score of 680 points out of a maximum 1000 points. On the sub-factor level, Boeing's proposal was determined to be Good in Technical Approach, Very Good in Management Approach, Good in Safety and Health Approach, and Good in Small Business Participation.

Mission Suitability Evaluation

Lockheed Martin

LM had four significant strengths, eight strengths, four weaknesses, and no significant

weaknesses or deficiencies in its Technical Approach and was rated Excellent for that subfactor. LM's significant strengths were across four of the six technical subfactors. The first significant strength was LM's approach to an integrated engineering process and facility evolution plan. This plan demonstrated a comprehensive understanding of the systems engineering of the integrated hardware, software, data, and displays of the Mission Control Center – Houston (MCC-H). The MCC-H is a very complex facility that supports the Space Shuttle, ISS, and Constellation Programs.

The second significant strength was written for LM's proposed numerous innovations to help synergize and consolidate multiple facilities on FDOC. The ideas were technically well thought out, and included the investment cost and net savings to the Government. Some examples include a proposal to consolidate positions in the MCC-H that monitor network systems by cross-training individuals that perform similar functions, combining software tools used by flight controllers to monitor the ISS Solar Arrays so that hardware constraints are not violated, and proposing a virtual network for operating systems used throughout the MCC-H complex.

The third significant strength was for LM's configuration management (CM) plan. This was a comprehensive approach that includes new ways of conducting business that would streamline the Government's management of critical facilities on FDOC. The fourth significant strength was noted for LM's approach to address the Constellation Training Facility (CxTF) development. This comprehensive approach identified key project management strategies, tools, and methodologies.

In the Management Approach subfactor, LM's proposal had two significant strengths, five strengths, two weaknesses, and no significant weaknesses or deficiencies for a rating of Excellent. LM received a significant strength for its proposed choice of Program Manager, Deputy Program Manager, and Chief Engineer. The proposed individuals have experience and a proven history of providing highly effective leadership and technical expertise to NASA, thereby greatly enhancing the likelihood of successful contract transition and performance. LM's other significant strength is on its overall approach to recruit, staff, train, and retain a qualified workforce.

LM's Safety and Health Plan had one significant strength, and no strengths, weaknesses or deficiencies for a rating of Very Good. The noted significant strength was that LM presented a plan that expanded beyond the requirements of the RFP, representing a comprehensive safety and health program that employs continuous improvement and employee involvement in the overall safety and health program. This has value to the Government in that it will further strengthen the overall safety and health program, which will reduce the potential for mishaps and incidents, and promote a safe work environment.

LM's Small Business Participation approach had one significant strength, one strength, and no weaknesses or deficiencies and was rated Excellent. The noted significant strength was that LM presented a plan which proposes small and small disadvantaged goals which greatly exceed the solicitation's established goals for the subcategories under the Small Business subcontracting plan.

NASA HQ

Boeing's proposal had no significant strengths, fourteen strengths, eleven weaknesses, one significant weakness, no deficiencies in its Technical Approach and was rated Good for that subfactor. Boeing was assessed one significant weakness by the SEB in regards to the proposed innovations asked for by the Government's RFP. Boeing's overall proposed technical approach failed to adequately explain how it could implement large amounts of savings across multiple facilities due to innovation, synergy, and other efficiencies. The lack of clarity with respect to the reductions for each facility greatly increases the risk to the Government that requirements will not be met and costs will be increased. Furthermore, Boeing provided inadequate substantiation to determine the feasibility of most of the innovations listed in Attachment J-13, Continuous Improvement Plan and cited in the Basis of Estimate (BOE). The instructions in Section L of the Government's RFP specify that for each Work Breakdown Structure (WBS) element the offeror shall explain the BOE by providing supporting rationale for all labor resources proposed, include a discussion regarding how the proposed Full Time Equivalents (FTEs) were estimated, and include sufficient narrative discussion to convince the Government that the proposed resources are realistic for the proposed technical and management approach, including explanations for any applicable efficiencies or cost savings.

In the Management Approach subfactor, Boeing's proposal had one significant strength, six strengths, two weaknesses, and no significant weaknesses or deficiencies for a rating of Very Good. Boeing received a significant strength for its proposed choice of Program Manager, Deputy Program Manager, and Chief Engineer. The proposed individuals have experience and a proven history of providing highly effective leadership and technical expertise to NASA, thereby greatly enhancing the likelihood of successful contract transition and performance.

Boeing's Safety and Health Plan had no significant strengths, one strength with no weaknesses or deficiencies for a rating of Good. Boeing's Small Business Participation approach was evaluated as having no significant strengths, three strengths with no weaknesses or deficiencies and was rated Good.

Past Performance

The offerors were asked to provide data on relevant contract work within the last eight years and were instructed to have their customers complete questionnaires on that work.

LM and its two major subcontractors submitted relevant contracts for review. All of the contracts are similar in scope and complexity to the contemplated FDOC contract. LM and its major subcontractors received primarily excellent and very good ratings on the submitted questionnaires. With regard to LM's past performance, the SEB assessed LM four significant strengths and six strengths. The significant strengths assessed were for receiving excellent award fee scores and recognition awards on numerous contracts; an excellent job of delivering, maintaining, and operating Mission Control Center

Very High level of confidence rating.

System facilities; demonstrated superior commitment to small businesses and small disadvantaged businesses; and delivering highly relevant flight training facilities. The aforementioned significant strengths are a strong indicator of similar potential successful contract performance on FDOC. Given all the very high ratings that LM

received from its customers on several highly relevant contracts, the SEB assessed it a

Boeing and its major subcontractor submitted relevant contracts for review. They received primarily excellent and very good ratings on all but one of the submitted questionnaires. Those ratings and the type of work on those contracts led to Boeing receiving two significant strengths and seven strengths. The significant strengths assessed were for receiving high award fee and cost scores indicating potential successful performance on FDOC, and for delivering highly relevant flight training facilities. However, on the Future Combat System (FCS) contract, on which Boeing has been performing work for three years. Boeing received primarily satisfactory ratings and one poor rating. The FCS reference stated that Boeing had significant difficulty in providing systems engineering for "systems of systems" on the FCS contract. Since FDOC deals with "system of systems" engineering work that is very similar to the work being performed on FCS, this evaluation led to reduced confidence in Boeing's ability to effectively handle that portion of the FDOC effort. The reference stated that though Boeing had replaced some of its management to address the issue and the situation was improved, it was still not fully resolved. As a result, Boeing was given a significant weakness on FCS that precluded it from getting a Very High level of confidence. Because Boeing had several contracts that had highly relevant work and most had very positive evaluations from the customers, the SEB assessed Boeing a High level of confidence rating.

Cost/Price

The cost proposals were evaluated consistent with the evaluation criteria in Section M of the RFP. Boeing's proposed cost was approximately 10% lower than the proposed cost of LM. A cost realism analysis, resulting in a probable cost, was performed for each proposal. The probable costs included specific adjustments to correct for technical weaknesses and resulted in LM having a slightly lower probable cost than Boeing.

Technical resource adjustments, increasing both FTEs and Non-Labor Resources (NLR), were made to LM's proposed cost to account for weaknesses in its proposal. Specifically, adjustments were made due to a change in the skill mix of MCC-H engineers to account for the need for more senior personnel, a shortfall in manpower and equipment in the MCC-H for a proposed efficiency that the Board had concerns which could not be implemented as proposed, an under-allocated travel budget, and underscoping of User Applications labor resources. The first three of these resulted in minimal additions to FTEs and NLRs. The underscoping of personnel for User Applications resulted in a more significant increase in FTEs, and provided almost all of the upward adjustment to LM's proposed cost. The cost realism analysis factored in the technical resource adjustments, as well as escalation errors found in the final LM team's

cost volumes, resulting in LM's proposed cost being increased by 8% to arrive at its probable cost. As a result of LM's relatively small overall proposed cost increase, the SEB assigned LM a cost confidence level of High.

The technical resource adjustments to Boeing's proposed cost were due to weaknesses in its proposal and required increasing both FTEs and NLRs. The adjustments were made to account for a shortfall in the number of personnel proposed for SSTF development, modification, and systems engineering; a shortfall in the proposed number of and skill mix for security personnel; inadequate development and modification funding beyond equipment replacement for Planning and Automation Systems; insufficient User Applications labor resources; and inadequate labor resources and material for MCC-H development, maintenance, sustaining engineering, and operations. Of these adjustments, the under-allocation of FTEs and NLRs for User Applications and MCC-H were roughly equivalent in magnitude and together resulted in almost all of the increase to Boeing's proposed cost. These resource adjustments, when factored into Boeing's proposed cost, resulted in a 26% increase to arrive at its probable cost. As a result of Boeing's significant overall cost increase, the SEB assigned Boeing a cost confidence level of Medium.

Selection Decision

The solicitation stated that Mission Suitability and Past Performance factors, when combined, are significantly more important than Cost/Price. Mission Suitability is more important than Past Performance, and that Mission Suitability and Cost/Price are approximately equal in importance.

Under the Mission Suitability factor, I agreed with the "Excellent" ratings the SEB gave LM under the subfactors Technical Approach and Management Approach. LM's approach to an integrated engineering process and facility evolution plan exceeded the Government's requirement and would provide measurable yearly improvement and annual cost savings for these activities. LM's proposal also included innovations, which I believe have a high likelihood to being implemented successfully. Additionally, I believed the significant strengths the proposal received for comprehensive configuration management (CM) and for its comprehensive approach to address the Constellation Training Facility (CxTF) development indicated LM fully understood the requirements of the solicitation, findings that greatly increased the likelihood of successful performance.

Additionally, I acknowledged LM's proposal had two significant strengths under the subfactor regarding Management Approach. Of these two strengths most notable is its overall approach to recruit, staff, train, and retain a qualified workforce. I recognized the SEB gave LM's proposal a "Very Good" for the Safety and Health Plan subfactor based on LM's plan that expanded beyond the requirements of the RFP. The SEB also rated LM's proposal "Excellent" for its Small Business Participation approach because the plan exceeded the established goals for the subcategories under Small Business subcontracting plan. I disagreed with the SEB rating for the subfactor Small Business Participation, believing a "Very Good" rating was more appropriate. It was my opinion that LM's plan for the overall goal of small business, which barely exceeded the

suggested goal for small business, prevented LM from receiving a rating of "Excellent" for this subfactor.

With regard to the proposal from Boeing, I agreed with the SEB assessment of a "Good" in subfactors regarding Technical Approach, Safety and Health, Small Business Participation and a "Very Good" in the subfactor regarding Management Approach. Under Technical Approach, I concluded the Boeing proposal did not contain the same level of understanding as LM did based upon the fact that the SEB did not find any significant findings for this subfactor and the SEB did not understand how Boeing would implement its proposed innovations.

In comparing the two proposals under Mission Suitability, I determined that LM had the superior proposal. My conclusion was primarily based upon the differences in the Technical Approach. I found LM showed a better understanding of the requirements through its approach to an integrated engineering process and facility evolution plan, its CM plan and its approach to the CxTF development. More importantly, LM had proposed numerous innovations, which I believe can be successfully implemented and which will be incorporated as requirements in the contract. While I acknowledge Boeing also proposed innovations, I shared the SEB's concerns that the proposal lacked the technical detail necessary to ensure that these innovations could be realized or implemented. Therefore, I had much less confidence Boeing could successfully achieve its proposed innovations.

Under the Past Performance factor, I recognized the SEB rated LM and Boeing "Very High" and "High" respectively. The primary difference between the two ratings was the past performance Boeing received on the FCS contract. The SEB concluded Boeing's performance on this contract was relevant to FDOC since both efforts involve "system of systems" engineering work. I did not believe the FCS was as relevant to FDOC since FSC is a developmental effort and FDOC is more an operational effort. I determined the factor of Past Performance was not a discriminator for purposes of selection based upon my conclusion that both offerors had similar levels of past performance.

With regard to the Cost/Price factor, I noted that Boeing's proposed cost was less than LM's proposed cost, but that LM's probable cost was slightly lower than Boeing's probable cost. I recognized Boeing's advantage in proposed costs was based in large part upon its proposed innovations, which were not adequately explained in its proposal. I concluded the offerors' probable cost would be a better indicator of actual costs for FDOC.

In making my decision, I found the difference in the Technical Approach to be the key discriminator in my selection decision. LM's proposal indicated a much higher degree of understanding and continued numerous innovations to help synergize and consolidate multiple facilities on FDOC which would result in a net savings to the Government. The approach and plans for these innovations were substantiated in the proposal and have a high potential for being successfully implemented. Moreover, if I were to disregard Boeing's lower proposed cost, I would still determine that the LM proposal represented the better value to the Government because its superior technical approach for

performing FDOC greatly offset its higher proposed cost.

Therefore, in accordance with the RFP that states the Government will award a contract resulting from this solicitation to the offeror whose proposal represents the best value after evaluation utilizing a combination of mission suitability, past performance, and cost/price, I find that LM is the best value and select it to perform the Facilities Development & Operations Contract. My selection decision is based solely on and is wholly consistent with the selection criteria and evaluation framework, including the relative importance of the factors and subfactors as explained in the solicitation and is supported by the SEB findings that I identified as relevant and material to my decision.

William H. Gerstenmaier Source Selection Authority Date